WHAT IS CLAIMED IS:

1. A method for sterilizing a preparation containing a blood component that is sensitive to ionizing radiation, said method comprising:

(i) reducing the residual solvent content of a preparation containing a blood component to a level effective to protect said preparation containing a blood component from said ionizing radiation; and

(ii) irradiating said preparation containing a blood component with a suitable ionizing radiation at an effective rate for a time effective to sterilize said preparation containing a blood component, wherein said effective rate is not constant for the duration of the sterilization procedure.

2. A method for sterilizing a preparation containing a blood component that is sensitive to ionizing radiation, said method comprising:

(i) adding to a preparation containing a blood component at least one stabilizer in an amount effective to protect said preparation containing a blood component from said ionizing radiation; and

(ii) irradiating said preparation containing a blood component with a suitable ionizing radiation at an effective rate for a time effective to sterilize said preparation containing a blood component, wherein said effective rate is not constant for the duration of the sterilization procedure.

3. A method for sterilizing a preparation containing a blood component that is sensitive to ionizing radiation, said method comprising:

(i) reducing the residual solvent content of a preparation containing a blood component to a level effective to protect said preparation containing a blood component from said ionizing radiation;

(ii) adding to said preparation containing a blood component at least one stabilizer in an amount effective to protect said preparation containing a blood component from said ionizing radiation; and

(iii) irradiating said preparation containing a blood component with a suitable ionizing radiation at an effective rate for a time effective to sterilize said preparation containing a blood component, wherein (i) and (ii) may be performed in any order and said effective rate is not constant for the duration of the sterilization procedure.

4. The method according to claim 1 or 3, wherein said solvent is water.

5. The method according to claim 1 or 3, wherein said solvent is an organic solvent.

6. The method according to claim 1, 2 or 3, wherein said ionizing radiation is gamma radiation.

7. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of not more than 3.0 kGy/hour.

8. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of more than 3.0 kGy/hour.

9. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of not more than 6.0 kGy/hour.

10. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of not more than 18.0 kGy/hour.

11. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of not more than 30.0 kGy/hour.

12. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component is maintained in a low oxygen atmosphere.

13. The method according to claim 12, wherein said preparation containing a blood component is maintained in an argon atmosphere.

14. The method according to claim 1 or 3, wherein said residual solvent content is reduced by lyophilization.

15. The method according to claim 1 or 3, wherein said residual solvent content is less than 2.0%.

16. The method according to claim 1 or 3, wherein said residual solvent content is less than 1.0%.

17. The method according to claim 1 or 3, wherein said residual solvent content is less than 0.5%.

18. The method according to claim 2 or 3, wherein said at least one stabilizer comprises at least one antioxidant.

19. The method according to claim 2 or 3, wherein said at least one stabilizer comprises at least one free radical scavenger.

20. The method according to claim 2 or 3, wherein said at least one stabilizer comprises a member selected from the group consisting of: ascorbic acid, or

a salt or ester thereof; DMSO; trehalose; mannitol, glutathione; tocopherol; polyhydric alcohols; flavanoids; and combinations of two or more thereof.

21. The method according to claim 1, 2 or 3, wherein said effective rate comprises a rate of about 3.0 kGy/hr.

22. The method according to claim 21, wherein said effective rate further comprises a rate of about 2.0 kGy/hr.

23. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component is irradiated at ambient temperature.

24. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component is irradiated at a temperature below ambient temperature.

25. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component is irradiated at a temperature below the eutectic point of said preparation containing a blood component.

26. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component comprises a member selected from the group consisting of cellular blood components, blood proteins, liquid blood components and combinations of two or more thereof.

27. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component comprises a cellular blood component.

28. The method according to claim 27, wherein said cellular blood component is selected from the group consisting of red blood cells, white blood cells, platelets and combinations of two or more thereof.

29. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component comprises a blood protein.

30. The method according to claim 29, wherein said blood protein is selected from the group consisting of blood clotting factors, enzymes, plasminogen, fibrinogen, immunoglobulins and combinations of two or more thereof.

31. The method according to claim 29, wherein said blood protein is selected from the group consisting of Factor I, Factor II, Factor III, Factor IV, Factor V, Factor VI, Factor VII, Factor VIII, Factor IX, Factor X, Factor XI, Factor XII, Factor XIII, von Willebrands Factor, Factor Ia, Factor IIa, Factor Va, Factor VIa, Factor VIIa, Factor VIIIa, Factor IXa, Factor Xa, Factor XIIIa and combinations of two or more thereof.

32. The method according to claim 1, 2 or 3, wherein said preparation containing a blood component comprises a liquid blood component.

33. The method according to claim 32, wherein said liquid blood component is selected from the group consisting of plasma and serum.

34. The method according to claim 32, wherein said liquid blood component is serum.

35. The method according to claim 32, wherein said liquid blood component is plasma.

36. The method according to claim 1, 2 or 3, wherein at least one sensitizer is added to said preparation containing a blood component prior to irradiating.